



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RB T102137-107
Job Sheet 196669



Part No: RB T102137-107

Job Qty: 5 pcs

Part Name: Tool Lifting



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 6/18/19

Job Tracking No:

Due Date: 6/20/19

Created By: Linda Lacelle

Type: SOLD

Description:

Note: DWG RB T102137-107 RevG IPP Rev A 17.12.07 New issue DP Verify DD/IPP Rev. B 19.06.07 Material change DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Small Fab - 1	5 pcs	6/20/19		0.00	2.50	Small Fab - 1		MLL
							Small Fab - 2		
							Small Fab - 3		
							Small Fab - 4		
							Small Fab - 5		
							Small Fab - 6		
							Small Fab - 7		
105	External Load - 2 - B4B	5 pcs	6/20/19		0.00	1.67	External Load - 1 - B4B		AP 2019/07/08
							External Load - 2 - B4B		
							External Load - 3 - B4B		
110	QC 5	5 pcs	6/20/19		0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
							QC 5 - 40		
120	Small Fab - 2 - B4B	5 pcs	6/20/19		0.00	5.00	Small Fab - 1 - B4B		MLL
							Small Fab - 2 - B4B		
							Small Fab - 3 - B4B		



Container No: S195919



Part: RB T102137 - 107

Job No: 196669

Serial No/Batch: S195919

Revision: G

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 07/04/19

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				Small Fab - 4 - B4B	
				Small Fab - 5 - B4B	
				Small Fab - 6 - B4B	
				Small Fab - 7 - B4B	
130 Outsource - 13 - Zinc Plating	5 pcs	6/20/19		GRO002-VC	5
140 Packaging 2-1 - Receive - B4B	5 pcs	6/20/19	0.00 0.00	Packaging 2 - 1 - B4B	
				Packaging 2 - 2 - B4B	
				Packaging 2 - 3 - B4B	
				Packaging 2 - 5 - B4B	
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 13 - B4B	
				Packaging 2 - 14 - B4B	
				Packaging 2 - 15 - B4B	
				Packaging 2 - 16 - B4B	
				Packaging 2 - 17 - B4B	
				Packaging 2 - 18 - B4B	
				Packaging 2 - 19 - B4B	
				Packaging 2 - 20 - B4B	
				Packaging 2 - 21 - B4B	
				Packaging 2 - 22 - B4B	
				Packaging 2 - 23 - B4B	
				Packaging 2 - 24 - B4B	
				Packaging 2 - 25 - B4B	
				Packaging 2 - 26 - B4B	
				Packaging 2 - 27 - B4B	
				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
150 QC 6	5 pcs	6/20/19	0.00 0.00	QC 6 - 9	
				QC 6 - 68	
				QC 6 - 61	
				QC 6 - 40	
160 Small Fab - 3 - B4B	5 pcs	6/20/19	0.00 1.67	Small Fab - 1 - B4B	
				Small Fab - 2 - B4B	
				Small Fab - 3 - B4B	
				Small Fab - 4 - B4B	
				Small Fab - 5 - B4B	
				Small Fab - 6 - B4B	
				Small Fab - 7 - B4B	
170 QC 5	5 pcs	6/20/19	0.00 0.00	QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	

-103 x5
 -105 x5
 -107 x5
 -109 x5

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MLC

				QC 5 - 3		
				QC 5 - 43		
				QC 5 - 49		
				QC 5 - 51		
				QC 5 - 58		
				QC 5 - 68		
				QC 5 - 9		
				QC 5 - 50		
				QC 5 - 30		
				QC 5 - 40		
180 Packaging 3-1 - Stock - B4B 5 pcs	6/20/19	0.00 0.00	Packaging 3 - 1 - B4B			
			Packaging 3 - 2 - B4B			
			Packaging 3 - 3 - B4B			
			Packaging 3 - 4 - B4B			
			Packaging 3 - 5 - B4B			
			Packaging 3 - 6 - B4B			
			Packaging 3 - 7 - B4B			
			Packaging 3 - 8 - B4B			
			Packaging 3 - 9 - B4B			
			Packaging 3 - 10 - B4B			
			Packaging 3 - 11 - B4B			
			Packaging 3 - 12 - B4B			
			Packaging 3 - 13 - B4B			
			Packaging 3 - 14 - B4B			
			Packaging 3 - 15 - B4B			
			Packaging 3 - 16 - B4B			
			Packaging 3 - 17 - B4B			
			Packaging 3 - 18 - B4B			
			Packaging 3 - 19 - B4B			
			Packaging 3 - 20 - B4B			
			Packaging 3 - 21 - B4B			
			Packaging 3 - 22 - B4B			
			Packaging 3 - 23 - B4B			
			Packaging 3 - 24 - B4B			
			Packaging 3 - 25 - B4B			
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			Packaging 3 - 28 - B4B			
			Packaging 3 - 29 - B4B			
			Packaging 3 - 30 - B4B			
			Packaging 3 - 31 - B4B			
			Packaging 3 - 32 - B4B			
			Packaging 3 - 33 - B4B			
			Packaging 3 - 34 - B4B			
			Packaging 3 - 35 - B4B			
			Packaging 3 - 36 - B4B			
190 QC 21 - FG 5 pcs	6/20/19	0.00 0.00	QC 21 - FG - 21			
			QC 21 - FG - 70			
			QC 21 - SA - 53			

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GA152A

Part Op 100 - (Small Fab) Assemble as per drawing. ***Assembly of lanyard and ball lock pin not required for load test***
 Descriptions: 105 - 1-Load test to 24,000Lbs as per RB T102137-107 sheet 6. 2-Sign and date sheet 6.
 110 - (QC5- Inspect part completeness to step on W/O)
 120 - (Small Fab) 1-Disassemble 2-Using marktronic engrave load test date on 103 as per DWG. 3-Bag and tag
 103,105,107,109 4-Using MARKTRONIC engraver engrave -103 as per note 7. 5-Bag and tag balance of parts and
 hardware and put aside for reassembly.
 130 - -Issue P/O to Groupe Altech: P/O 43996 -RB T102137-107-103 -RB T102137-107-105 -RB T102137-107-
 107 -RB T102137-107-109 -Issue P/O; _____ -Zinc plate, ASTM B633 TYPE 2 SC2 -Color; yellow -Material type;
 4140 -Certificate of Conformity is required
 140 - (Receive & Inspect for Damage & Mat'l Certs)
 150 - (QC6- All purchased or subcontracted products) Return these parts to Small Fab; -RB T102137-107-103 -RB
 T102137-107-105 -RB T102137-107-107 -RB T102137-107-109

160 - (Small Fab) 1-Fabricate lanyard and reassemble as per drawing. See note 8,9,10 and 11.

170 - (QC5- Inspect part completeness to step on W/O)

180 - (Identify as per dwg & Stock Location: _____) The tool must be packaged with a desiccant bag into a tight fitting sealed plastic bag as per DWG.

190 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
65 GA199 51262 160A 150 150 64 70 58 90630A165	Grade 8 Steel Nylon Insert Locknut 5/8"-18 X 3/4" Height	5 Ea (1 ea)	100-Small Fab - 1	5192686
AN10-47A	Bolt	5 Ea (1 ea)	100-Small Fab - 1	5194505
NAS1149F1063P	Washer (AN960-1016)	10 Ea (2 ea)	100-Small Fab - 1	5067037
NAS1333S6S10D	Quick Release Pin	5 Ea (1 ea)	100-Small Fab - 1	5189369
RB T102137-107-103 Strap - Good		5 pcs (1 ea)	100-Small Fab - 1	5190072
RB T102137-107-105 Strap - Good		5 pcs (1 ea)	100-Small Fab - 1	5189419
RB T102137-107-107 Sleeve - Good		5 pcs (1 ea)	100-Small Fab - 1	5189184
150 RB T102137-107-109 Clevis - Good		5 pcs (1 ea)	100-Small Fab - 1	5189606
3896T31	Ferule 1/16 X 3/8" - Aluminum	10 Ea (2 ea)	160-Small Fab - 3 - B4B	5137368
64 90905A655	316 SS Split Ring 15/16" ID. X 1-1/16" OD. X 1/8" Thick	5 Ea (1 ea)	160-Small Fab - 3 - B4B	3x 5198299 2x 5199350
70 91772A826	18-8 SS Phillips Pan Head Screw #10-32 X 5/16" Long	5 Ea (1 ea)	160-Small Fab - 3 - B4B	5192659
58 97840A460	18-8 SS Tab For Wire Rope Lanyard 1.40" Long X 1/2" Width X 1/16" Thick	5 Ea (1 ea)	160-Small Fab - 3 - B4B	5199344
CL-2-C	Lanyard Wire	4.5000 ft (.9 ea)	160-Small Fab - 3 - B4B	5190004

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Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Small Fab - 1	90630A165	5	0	0
	AN10-47A	5	0	0
	NAS1149F1063P	10	153	0
	NAS1333S6S10D	5	9	0
	RB T102137-107-103	5	10	0
	RB T102137-107-105	5	20	0
	RB T102137-107-107	5	10	0
	RB T102137-107-109	5	6	0
160-Small Fab - 3 - B4B	3896T31	10	579	0
	90905A655	5	0	0
	91772A826	5	0	0
	97840A460	5	0	0
	CL-2-C	5	259	0

Part Specifications

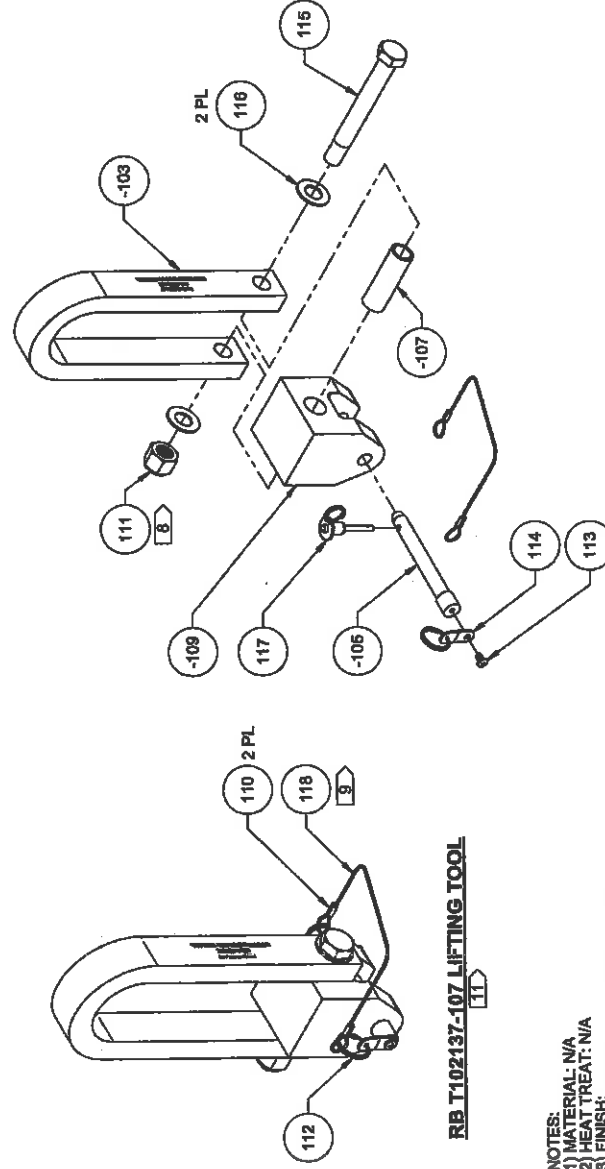
Specifications could not be found.

Plex 6/18/19 3:00 PM dart.lacelle.linda

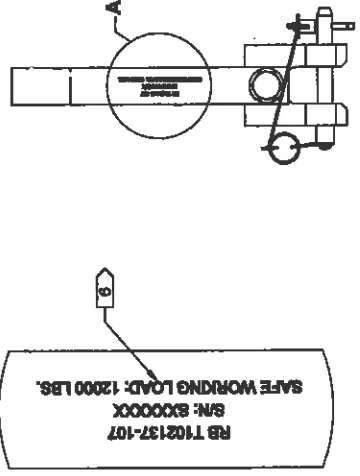
SHOP COPY
RETURN TO
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SUBJECT TO AMENDMENT

WITHOUT NOTICE
WORK ORDER
NO. 196669

ITEM #	QTY	PART #	PART TITLE
-103	1	RB T102137-107-103	STRAP
-105	1	RB T102137-107-105	PIN
-107	1	RB T102137-107-107	SLEEVE
-109	1	RB T102137-107-109	CLEVIS
-110	2	McMaster#9896T31 OR EQUIV.	ALUMINUM WIRE ROPE COMPRESSION SLEEVE 1/16" DIA. X 3/8" LG.
-111	1	McMaster#9030A165 OR EQUIV.	GRADE 8 STEEL NYLON INSERT LOCKNUT 5/8"-18 X 3/4" HT.
-112	1	McMaster#90905A655 OR EQUIV.	3/16 SS SPLIT RING 1 1/16" ID. X 1-1/16" OD. X 1/8" THK.
-113	1	McMaster#91772A828 OR EQUIV.	18-8 SS PHILLIPS PAN HEAD SCREW #10-32 X 5/16" LG.
-114	1	McMaster#97840A460 OR EQUIV.	18-8 SS TAB FOR WIRE ROPE LANYARD 1.40" LG. X 1/2" WIDTH. X 1/16" THK.
-115	1	AN10-47A	BOLT
-116	2	NAS1149F1063P	WASHER
-117	1	NAS1333S8S100	QUICK RELEASE PIN
-118	1	CARR-LANE#CL-2-C	NYLON COATED STEEL LANYARD 1/16" DIA.



NOTES:
1) MATERIAL: N/A
2) HEAT TREAT: N/A
3) FINISH:
4) TOLERANCES: XX = +/- 0.1" / +/- 1"
XXX = +/- 0.005" / +/- 0.5"
XXXX = +/- 0.0005" / +/- 0.05"
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/- 0.005"
UNITS: INCHES UNLESS OTHERWISE NOTED
IDENTIFICATION: MACHINE ENGRAVE OR DOT MARK TYPED, SIN AND SWL AS SHOWN
ASSEMBLY: MACHINE ENGRAVE
TIGHTEN NUT UNTIL IT CONTACTS SURFACE. ENSURE 1-4 THREADS IN SAFETY
ASSEMBLED LANYARD LENGTH MUST BE 10" +/- 1". LANYARD MUST MOVE FREELY WHEN INSTALLING/REMOVING ITEM 117
APPLY RED THREADLOCKER LOCITITE 263/262 ON THREADS OF ITEM 113 THEN ASSEMBLE WITH ITEM -105, AND REMOVE EXCESS
INSTALL ITEM 113 HAND TIGHT
THE TOOL ASSY MUST BE PACKAGED WITH A DESICCANT BAG INTO A TIGHT FITTING SEALED PLASTIC BAG



DETAIL A

REV.	DESCRIPTION	ECN #	BY
1	SEE PREVIOUS REVISION FOR MORE INFORMATION		
2	UPDATED DRAWING TEMPLATE		
3	ITEM -111 WAS NAS810-64 IS ITEM 115 AN10-47A		
4	ITEM -113 WAS MS21032C10 IS ITEM 118 NAS1149F1063P		
5	ITEM -115 WAS NAS1281-10 IS ITEM 111 McMaster#90905A655 OR EQUIV. ITEM -117 WAS McMaster-CARR #90272A238 IS ITEM 113 McMaster#91772A828 OR EQUIV.		
6	REMOVED ITEMS -116, -125, AND -129		
7	-103 MATERIAL WAS 4140M4142 IS 4140. FINISH WAS CAD PLATE YELLOW IS ZINC PLATE YELLOW. DIM WAS 0.8280-0.8245 IS 0.841. DIM WAS 1.25 IS 1.25. REMOVED ENGRAVING NOTES. REMOVED 0.75 AND 0.83 DIMS. ADDED 4.00 DIM.		
8	-105 MATERIAL WAS 4140M4142 IS 4140. FINISH WAS CAD PLATE YELLOW IS ZINC PLATE YELLOW. HEAT TREAT WAS RC 46-50 IS 46-52 RC. DIM WAS 0.194 IS 0.0196. DIM WAS 10.24 UNC +/- 0.010-10.52 UNC +/- 0.010. DIM WAS 0.393 +/- 0.005. DIM WAS 0.716, 2.00, 1.18, 0.28, AND 1.38 DIMS. REMOVED ENGRAVING NOTE.		
9	-107 MATERIAL WAS 4140M4142 IS 4140. FINISH WAS CAD PLATE YELLOW IS ZINC PLATE YELLOW. HEAT TREAT WAS RC 32-37 IS 32-38 RC. DIM WAS 0.827-0.805-0.802 IS 0.841. DIM WAS 2.500-2.000-0.010 IS 2.485-2.486		
10	-109 MATERIAL WAS 4140M4142 IS 4140. FINISH WAS CAD PLATE YELLOW IS ZINC PLATE YELLOW. DIM WAS 2.38 IS 2.485-2.486. DIM WAS 0.304-0.301 IS 0.3015-0.306. DIM WAS 0.393 +/- 0.005, 0.716, 2.00, 1.18, 0.28, AND 1.38 DIMS. REMOVED ENGRAVING NOTE.		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

TOOL PART #
RB T102137-107

REV. G
SHEET 1 OF 6

SCALE
N/A

TITLE
LIFTING TOOL

DATE 07/06/2019

COMPONENT © 2019 BY DART AEROSPACE LTD
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1. AFTER INSPECTION, PLACE LIFTING TOOL IN AN APPROPRIATE FIXTURE AND USE THE QUICK RELEASE PIN TO LOCK THE PIN INTO PLACE. ATTACH THE LIFTING TOOL TO AN APPROPRIATE TEST WEIGHT OF 10809 KG / 24000 LBS.

- INSPECTOR:**

TESTER: ALAN PARRY / MICHEL LAONDRE

S/N: 5195919

DATE: 2019/07/08

DATE 07/06/2019

This document is PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IF IT IS NOT TO BE USED FOR ANY PURPOSE OR DISCLOSED OR REPRODUCED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF THE ISSUING OFFICE.



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB043996



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

Attention: Grenon, Sylvie

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB043996

PO Date: 7/12/19

Due Date: 7/22/19

**Purchase Order
Revision:**

Revision Date:

Ship-To Contact: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground
Pynt Terms: Net 60

Freight Terms:

Special Comments:

E-MAILED
7/19/2019

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	196669	RB T102137-107	Tool Lifting -Issue P/O to Groupe Altech: P/O -RB T102137-107-103 x 5 -RB T102137-107-105 x 5 -RB T102137-107-107 x 5 -RB T102137-107-109 x 5 -Zinc plate, ASTM B633 TYPE 2 SC2 -Color; yellow -Material type; 4140 -Certificate of Conformity is required	Firmed	-	7/22/19	5 pcs	0 pcs	5 pcs	\$18.00/pcs	\$90.00
Grand Total:											\$90.00

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5 X 4 = 20 JUL 23 2019



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB043996



Order Notes

Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable)

A022 Apical Processing

A024 process certifications

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 7/16/19 8:34 AM Dart.Guerin.Kimberley



Certificat de Conformité / Certificate of Compliance

(020737-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

020737 - 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By		Transport / No de Compte Courier / Acc. No.		Bon de commande Client Customer Purchase Order No.				
22-Jul-2019		Jigar Patel				POHB043996				
#Ligne Line#	No. de Série / # Pièce Part Number /Line Item Details Job # / Ref #	Description pièce(s)			CATG U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir / Back Order
1	RBT102137-107 (LOT 20) Rev.	RBT102137-107 (LOT 20) ZINC-YELLOW [ZINC YELLOW] OLD YELLOW CHROMATE, 96 hours ASTM B633 TYPE 2, SC 2			ZINC LOT	20	20	0	0	DAS 40 9-89

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JUL 22 2019

DART AEROSPACE LTD.

RECEIVED

JUL 22 2019

DART AEROSPACE LTD.

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

J. Jay

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.